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a small particle size on the order of 0.1 to 5 microns, and typically less than 10 microns." With respect to claims 6-9 and 23, the Examiner asserted that, "it would be inherent based on the diameter of the metal vanadium particles as taught by Koksbang, for the collection of particles and the battery to have a diameter greater than about 4 times the average diameter of the collection particles and to maintain the claimed distribution of particle sizes, because Koksbang teaches a metal vanadium oxide having an average diameter less than about 1 micron." However, Applicants maintain that the Koksbang patent does not teach all of the features of Applicants' claimed invention. Furthermore, the Examiner has not provided a reasonable basis to assert inherent anticipation. Thus, the Examiner has failed to establish prima facie anticipation. Applicants submit that the Koksbang patent does not anticipate Applicants' claimed invention and respectfully request reconsideration of the rejections in view of the following comments.

The Examiner asserted, in response to Applicants' arguments filed on June 20, 2002, that certain features, i.e., filtration technology and selecting a portion of a particle collection, are not recited in the claims. Those features were discussed solely to illustrate the point that, at the time of filing, submicron particles with a narrow particle distribution could not be selected from another collection of particles. In particular, a broad distribution of particles, like the one disclosed in the Koksbang patent, does not provide to a person of ordinary skill in the art narrower distributions of particles that can be separated out of the broader distribution. Thus, the filtration and separation features were discussed as evidence that the Koksbang patent does not inherently anticipate the present invention, since the Koksbang patent discloses a collection of lithium vanadium oxide particles with a broad particle size distribution of "0.1 to 5 microns, and typically less than 10 microns." See, for example, column 2, lines 59-61.

In addition, the Examiner also indicated, in response to Applicants' arguments filed on June 20, 2002, that a solid state reaction with a dried lithium compound and vanadium

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oxide particles is not recited in the rejected claims. Applicants' respectfully submit that the patentability of a product does not depend on the method of production. See MPEP § 2113. Furthermore, Applicants are in no way relying on their methodology for patentability of the composition claims other than enabling the claimed invention. The discussion of production methodology was in response to the Examiner's assertion that because the particle production process in the present invention is the same as the process in the Koksbang patent, the particle distributions would also be the same. Thus, Applicants' intended to highlight in the Response After Final of February 25, 2002, and continue to assert now, that the particle production methods are different, and as a result, the Examiner's assertion that the processes are the same and therefore the product properties are the same is not well founded.

Moreover, the presently claimed invention relates to a collection of particles comprising metal vanadium oxide, wherein the particles have an average diameter less than about 1 micron. In contrast, the Koksbang patent discloses a distribution of lithium vanadium oxide particles between "0.1 to 5 microns, and typically less than 10 microns." See, for example, column 2, lines 59-61. An average particle size and a particle distribution are related, although separate, properties of a collection of particles. The particle distribution of the Koksbang patent does not have an average particle size of less than 1 micron, and the patent does not disclose how to select a narrower distribution within the broad particle distribution. As noted above, Applicants have presented unrefuted evidence that a person of ordinary skill in the art could not select a narrow particle distribution from within a broader distribution using available filtration technology. The Koksbang patent does not teach or suggest selection of a portion of their particle collection to form a more uniform material. Thus, the Examiner has failed to establish a prima facie case of anticipation.

With respect to claims 6-9 and 23, "the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or

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characteristic.” See MPEP § 2112. Furthermore, “to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” See MPEP § 2112. The Koksbang patent discloses a collection of metal vanadium oxides particles with a large particle distribution. As discussed above, the Koksbang particle distribution does not lead to the Applicants’ claimed distribution because the Koksbang patent does not teach a method of selecting a narrow distribution of particles from the broad distribution. Moreover, the process for forming the metal vanadium oxides in the present invention is different than the process disclosed in the Koksbang patent. As a result, Applicants’ claimed particle distribution is not inherent in the collection of particles disclosed in the Koksbang patent.

Furthermore, because claims 6-9 and 23 are dependent claims, they incorporate all of the features of the claims from which they depend. Claims 6-9 and 23 all depend upon claims which relate to a collection of metal vanadium oxide particles with an average diameter of less than about 1 micron. As noted above, the Koksbang patent does not disclose a collection of metal vanadium oxide particles with an average diameter less than 1 micron. Instead, the Koksbang patent discloses a collection of metal vanadium oxide particles with a broad distribution of particle sizes, which have an average particle size significantly larger than 1 micron. Since the Koksbang patent does not teach or suggest the claimed average particle size, the Koksbang patent does not prima facie anticipate Applicants’ claimed invention.

Since the Koksbang patent does not anticipate Applicants’ claimed invention, Applicants respectfully request withdrawal of the rejection of claims 1-3, 6-9, 17 and 22-26 under 35 U.S.C. § 102(b) as being anticipated by the Koksbang patent.

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Rejections Under Koksbang ('214)

The Examiner rejected claim 10 under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 5,512,214 to Koksbang (the Koksbang '214 patent). More specifically, the Examiner asserted that the Koksbang '214 patent "discloses a process for producing lithium-vanadium metal oxides." Furthermore, the Examiner also asserted that "Koksbang continues to disclose wherein the vanadium oxide has a starting particle size of less than 10 microns." Applicants' respectfully submit that the Koksbang '214 patent does not anticipate the presently claimed invention and reconsideration of the rejection is requested based upon the following comments.

First, Applicants desire to clarify that a subrange within a broader range in a reference is **not** anticipated. This is a well established principle. See MPEP 2131.03 and 2144.05. Thus, Applicants range of particle sizes of less than about a micron is not anticipated by the disclosure in Koksbang '214 of particle with a size less than 10 microns simply does not anticipate Applicants' claimed range.

Furthermore, according to the Federal Circuit, "to be prior art under section 102(b), a reference must be enabling. That is, it must put the claimed invention in the hands of one skilled in the art." In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993)(unpublished). Assertions in a prior art reference do not support an anticipation or obviousness rejection unless the references place the claimed invention in the hands of the public. Beckman Instruments Inc. v. LKB Produkter AB, 13 USPQ2d 1301, 1304 (Fed. Cir. 1989). "In order to render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method." Id. While a properly citable reference is prior art for all that it teaches, references along with the knowledge of a person of ordinary skill in the art must be enabling to place the invention in the hands of the public. In re Paulsen, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994). See also In re Donohue, 226 USPQ 619, 621 (Fed. Cir. 1985).

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The Koksbang '214 patent discloses vanadium oxide particles having "an average diameter size of less than 100 microns, desirably less than 50 microns, and preferably, less than 10 microns." See, for example, column 5, lines 1-4. However, the Koksbang '214 patent does not enable one skilled in the art to produce a collection of vanadium oxide particles with an average particle size of less than 1 micron. The Koksbang '214 patent fails to teach a method for selecting vanadium oxide particles with an average diameter of less than 1 micron, and one of ordinary skill in the art would be unable to produce such a collection of particles from the disclosed process. In contrast, Applicants' claimed invention relates to a method of producing particles of metal vanadium oxide from vanadium oxide particles having an average diameter of less than 1 micron. Because the Koksbang '214 patent does not enable one skilled in the art to produce a collection of vanadium oxide particles with an average diameter of less than 1 micron, the Koksbang '214 patent has not placed Applicants' claimed invention in the hands of the public. As a result, the Koksbang '214 patent is not prior art and cannot anticipate Applicants' claimed invention.

Since the Koksbang '214 patent does not anticipate Applicants' claimed invention, Applicants' respectfully request the withdrawal of the rejection under 35 U.S.C. § 102(b) as being anticipated by the Koksbang '214 patent.

CONCLUSION

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

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The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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November 8, 2002
Date


Shari R. Thorndike